

FIGURE 1

FIGURE 2A

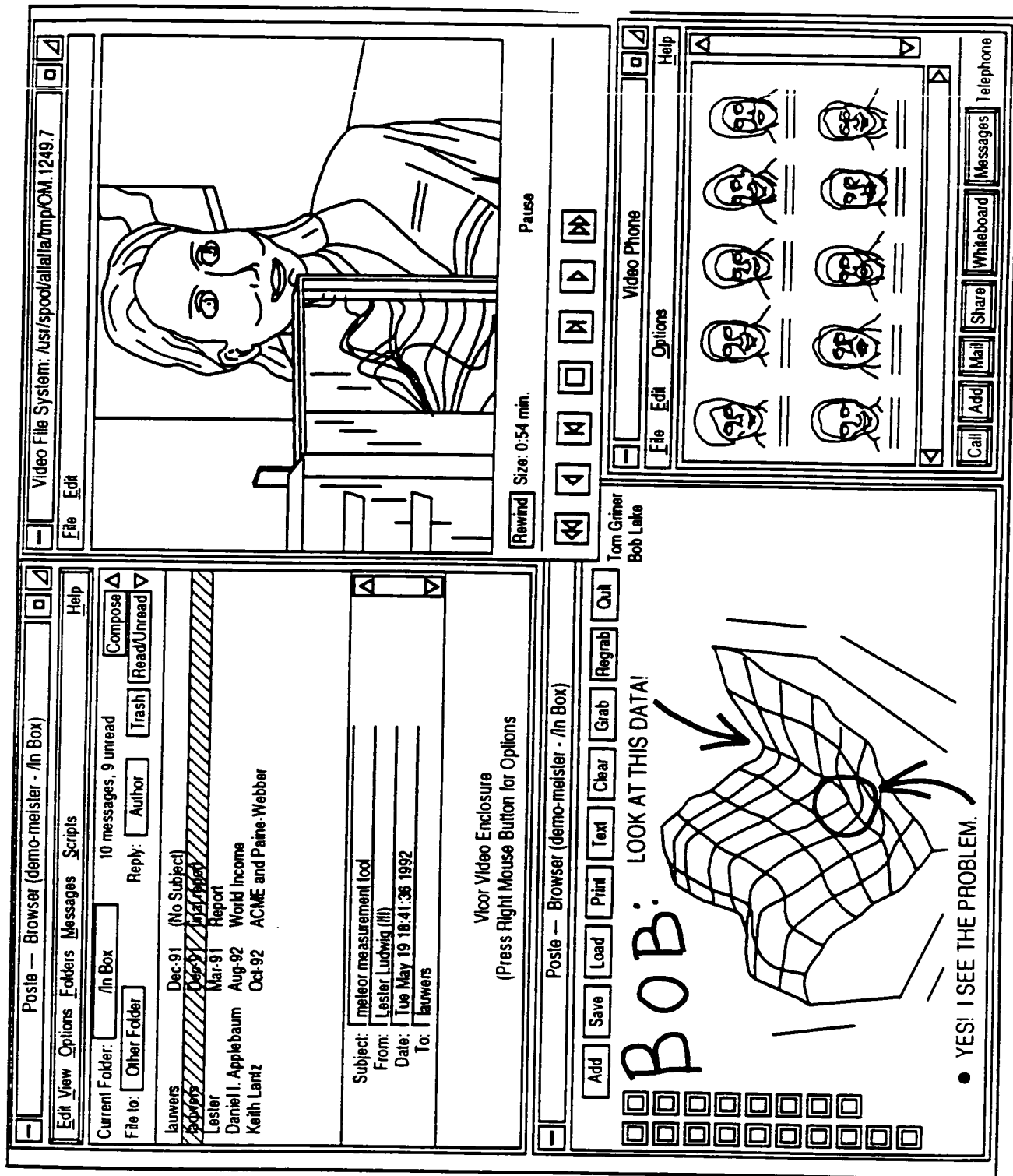


Figure 2B

$\bar{u}_1^{(n)}$	$\bar{u}_2^{(n)}$	$\bar{u}_3^{(n)}$	$\bar{u}_4^{(n)}$	$\bar{u}_5^{(n)}$	$\bar{u}_6^{(n)}$	$\bar{u}_7^{(n)}$	$\bar{u}_8^{(n)}$	$\bar{u}_9^{(n)}$	$\bar{u}_{10}^{(n)}$	$\bar{u}_{11}^{(n)}$	$\bar{u}_{12}^{(n)}$	$\bar{u}_{13}^{(n)}$	$\bar{u}_{14}^{(n)}$	$\bar{u}_{15}^{(n)}$	$\bar{u}_{16}^{(n)}$	$\bar{u}_{17}^{(n)}$	$\bar{u}_{18}^{(n)}$	$\bar{u}_{19}^{(n)}$	$\bar{u}_{20}^{(n)}$	$\bar{u}_{21}^{(n)}$	$\bar{u}_{22}^{(n)}$	$\bar{u}_{23}^{(n)}$	$\bar{u}_{24}^{(n)}$	$\bar{u}_{25}^{(n)}$	$\bar{u}_{26}^{(n)}$	$\bar{u}_{27}^{(n)}$	$\bar{u}_{28}^{(n)}$	$\bar{u}_{29}^{(n)}$	$\bar{u}_{30}^{(n)}$	$\bar{u}_{31}^{(n)}$	$\bar{u}_{32}^{(n)}$	$\bar{u}_{33}^{(n)}$	$\bar{u}_{34}^{(n)}$	$\bar{u}_{35}^{(n)}$	$\bar{u}_{36}^{(n)}$	$\bar{u}_{37}^{(n)}$	$\bar{u}_{38}^{(n)}$	$\bar{u}_{39}^{(n)}$	$\bar{u}_{40}^{(n)}$	$\bar{u}_{41}^{(n)}$	$\bar{u}_{42}^{(n)}$	$\bar{u}_{43}^{(n)}$	$\bar{u}_{44}^{(n)}$	$\bar{u}_{45}^{(n)}$	$\bar{u}_{46}^{(n)}$	$\bar{u}_{47}^{(n)}$	$\bar{u}_{48}^{(n)}$	$\bar{u}_{49}^{(n)}$	$\bar{u}_{50}^{(n)}$	$\bar{u}_{51}^{(n)}$	$\bar{u}_{52}^{(n)}$	$\bar{u}_{53}^{(n)}$	$\bar{u}_{54}^{(n)}$	$\bar{u}_{55}^{(n)}$	$\bar{u}_{56}^{(n)}$	$\bar{u}_{57}^{(n)}$	$\bar{u}_{58}^{(n)}$	$\bar{u}_{59}^{(n)}$	$\bar{u}_{60}^{(n)}$	$\bar{u}_{61}^{(n)}$	$\bar{u}_{62}^{(n)}$	$\bar{u}_{63}^{(n)}$	$\bar{u}_{64}^{(n)}$	$\bar{u}_{65}^{(n)}$	$\bar{u}_{66}^{(n)}$	$\bar{u}_{67}^{(n)}$	$\bar{u}_{68}^{(n)}$	$\bar{u}_{69}^{(n)}$	$\bar{u}_{70}^{(n)}$	$\bar{u}_{71}^{(n)}$	$\bar{u}_{72}^{(n)}$	$\bar{u}_{73}^{(n)}$	$\bar{u}_{74}^{(n)}$	$\bar{u}_{75}^{(n)}$	$\bar{u}_{76}^{(n)}$	$\bar{u}_{77}^{(n)}$	$\bar{u}_{78}^{(n)}$	$\bar{u}_{79}^{(n)}$	$\bar{u}_{80}^{(n)}$	$\bar{u}_{81}^{(n)}$	$\bar{u}_{82}^{(n)}$	$\bar{u}_{83}^{(n)}$	$\bar{u}_{84}^{(n)}$	$\bar{u}_{85}^{(n)}$	$\bar{u}_{86}^{(n)}$	$\bar{u}_{87}^{(n)}$	$\bar{u}_{88}^{(n)}$	$\bar{u}_{89}^{(n)}$	$\bar{u}_{90}^{(n)}$	$\bar{u}_{91}^{(n)}$	$\bar{u}_{92}^{(n)}$	$\bar{u}_{93}^{(n)}$	$\bar{u}_{94}^{(n)}$	$\bar{u}_{95}^{(n)}$	$\bar{u}_{96}^{(n)}$	$\bar{u}_{97}^{(n)}$	$\bar{u}_{98}^{(n)}$	$\bar{u}_{99}^{(n)}$	$\bar{u}_{100}^{(n)}$
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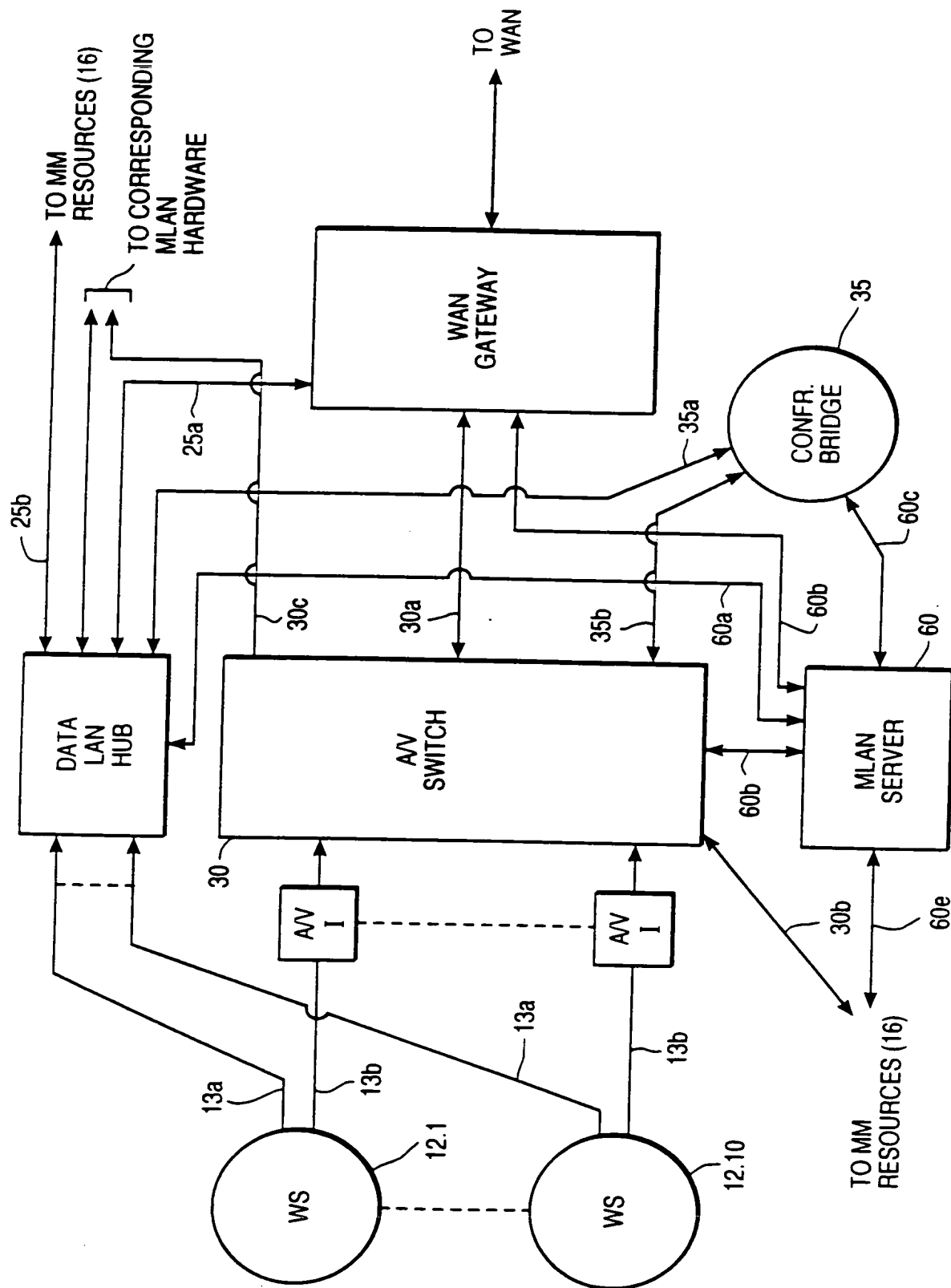


FIGURE 3

LOCATION B

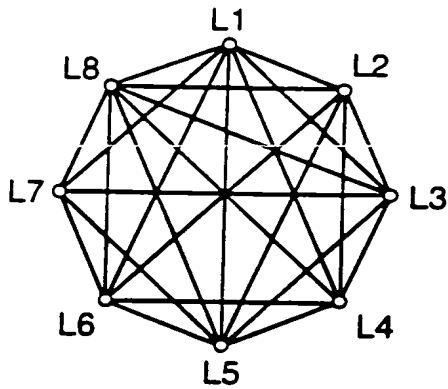


FIGURE 5

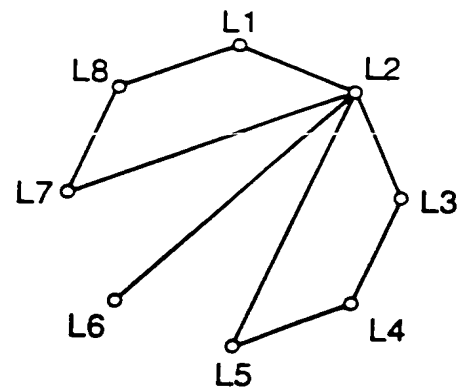


FIGURE 6

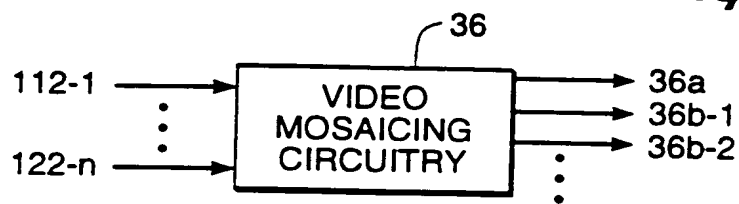


FIGURE 7

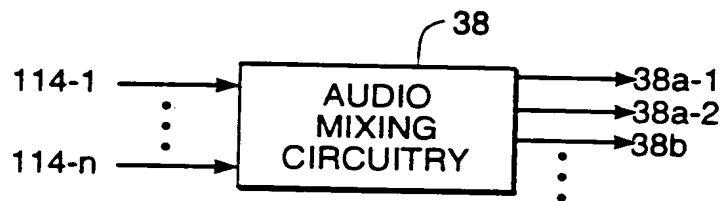


FIGURE 9

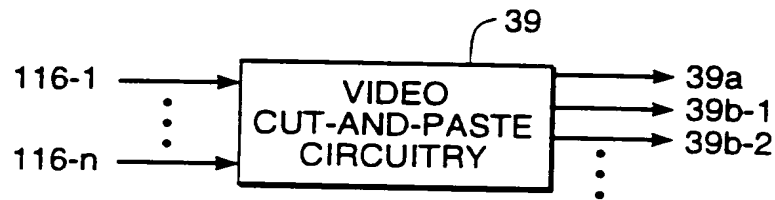


FIGURE 10

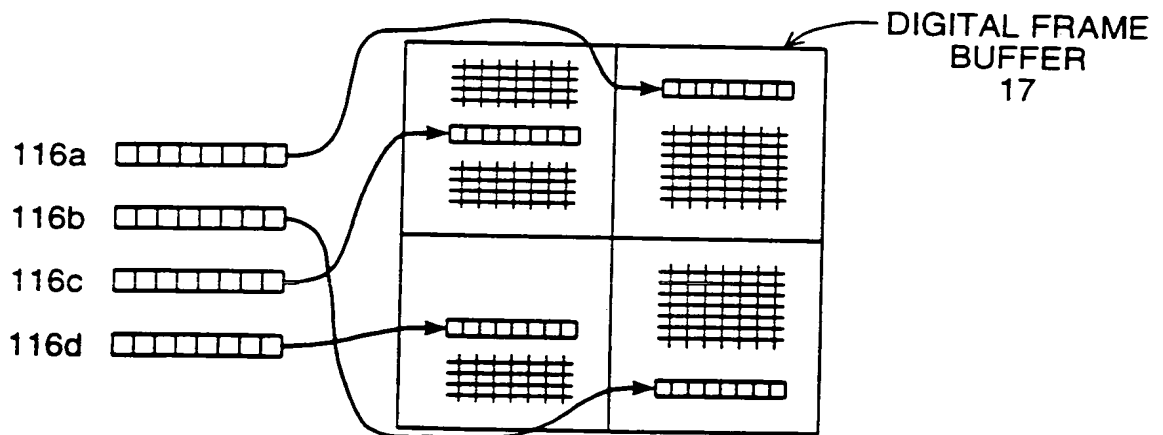


FIGURE 11

— Edit

Hangup Hold Mute Leave Word Share Whiteboard Adjourn Record

Calls on Hold:

Resume Lester Ludwig, Keith Lantz

Resume

Resume

FIGURE 8A

The screenshot shows the 'Edit' window of the 'The Sims' game. It features a four-person video conference. The participants are Tom Griner, Lester Ludwig, Keith Lantz, and an unnamed woman. A menu is open over Tom Griner's video feed, listing options: Hangup, Hold, Close Up, and Adjourn. Below the video feeds is a control bar with buttons: Hangup, Hold, Mute, Leave Word, Share, Whiteboard, Adjourn, and Record. At the bottom, there is a section titled 'Calls on Hold:' with three rows, each containing a 'Resume' button and a text field. The first text field contains the name 'Lester Ludwig, Keith Lantz'.

FIGURE 8B

The screenshot shows a video conference application window. The main area displays eight participants in a 2x4 grid. Below the grid are controls for 'Calls on Hold' and a list of participants including 'Lester Ludwig, Keith Lantz'. To the right is a 'Collaboration Initiator' panel with buttons for 'File', 'Edit', 'Options', and 'Help'. Below this is a list of participants with their names and icons. At the bottom is a taskbar with various application icons like 'Shell', 'maker', 'VCR', 'Editor', 'Calculator', 'VideoPhone', 'ColorPrint', etc.

FIGURE 8C

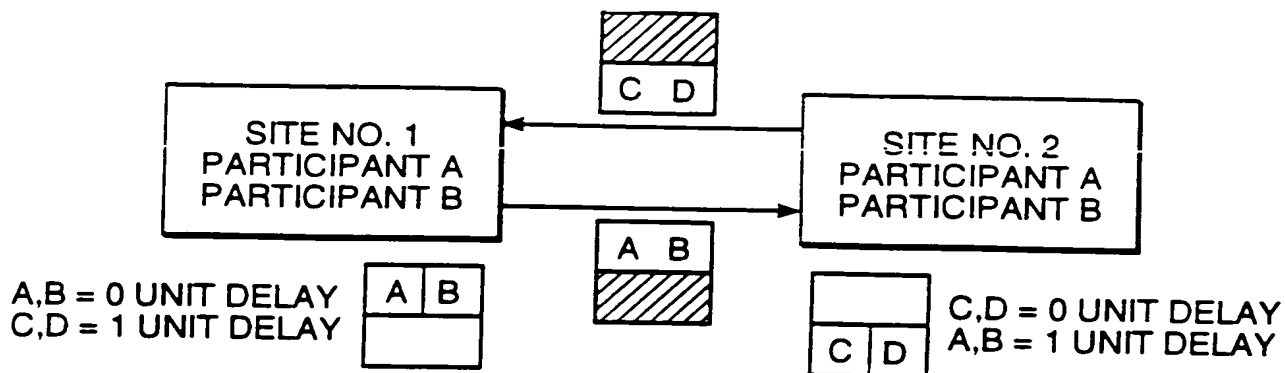


FIGURE 12A

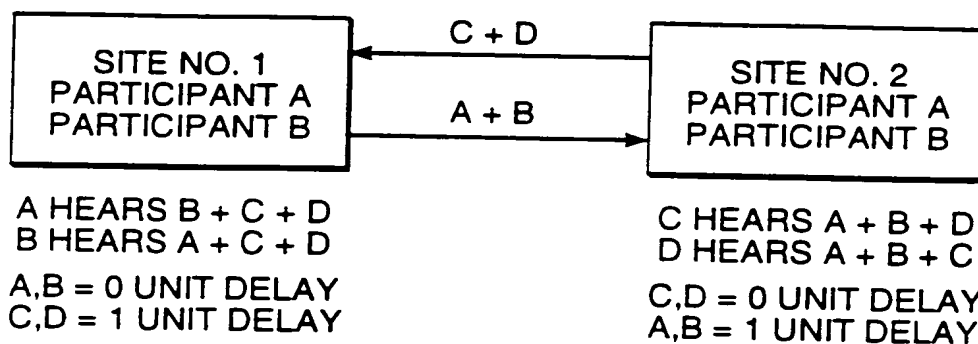


FIGURE 12B

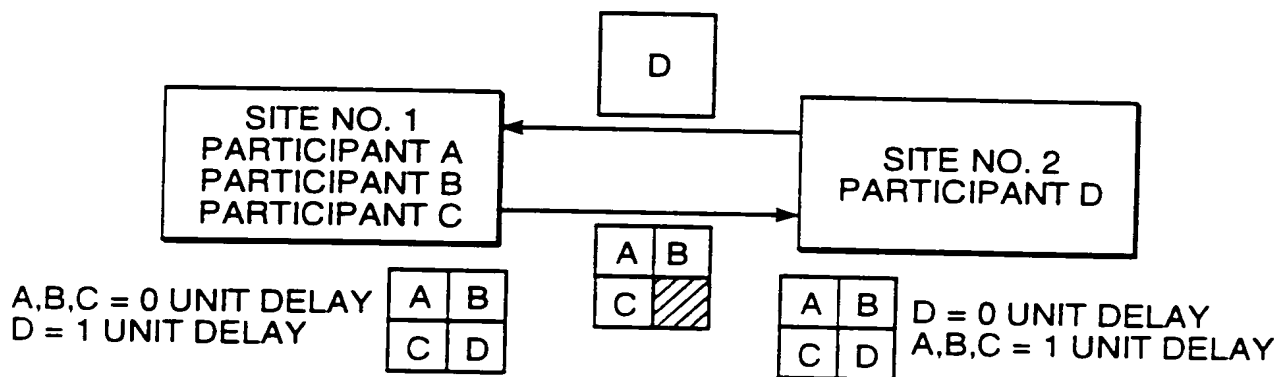


FIGURE 13A

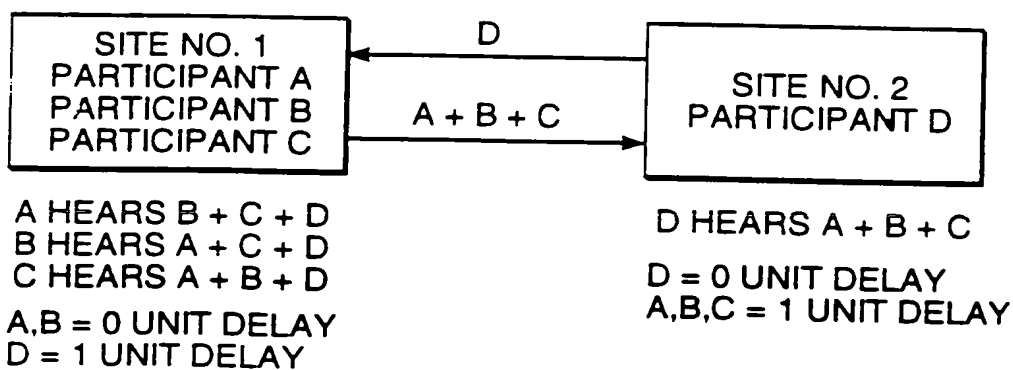
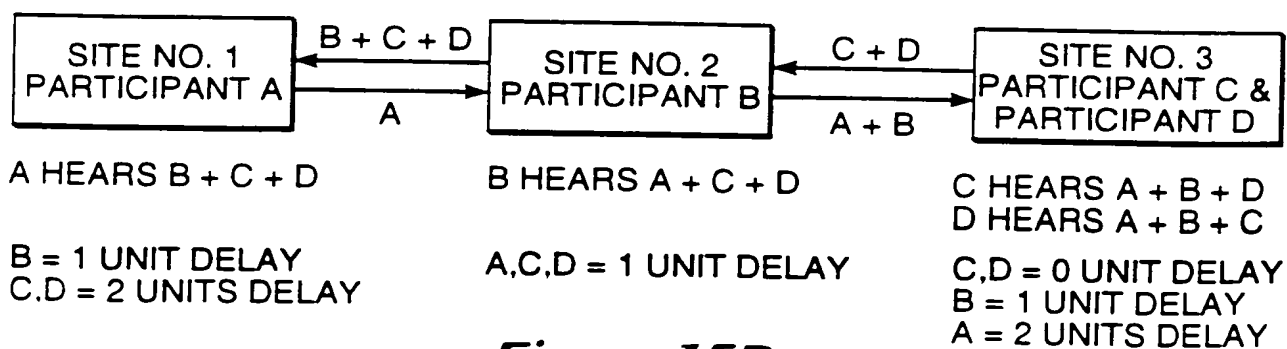
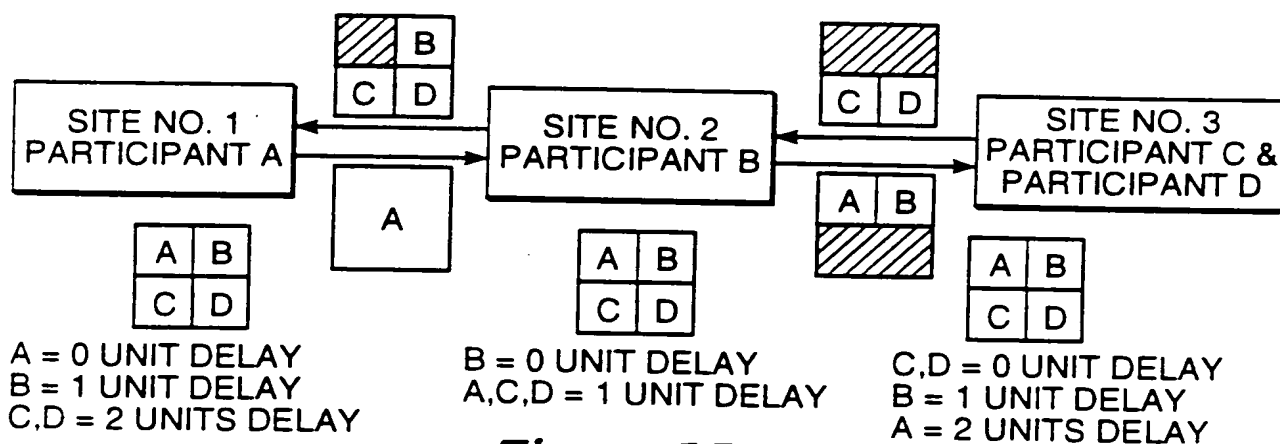
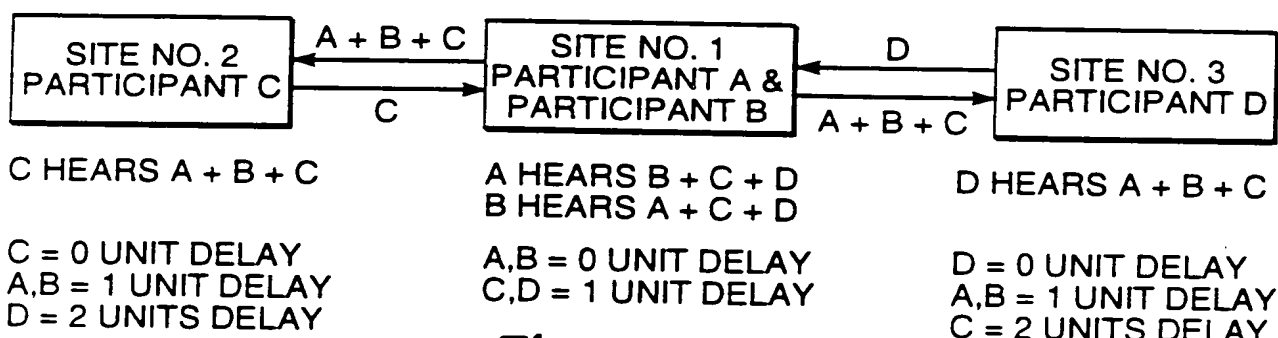
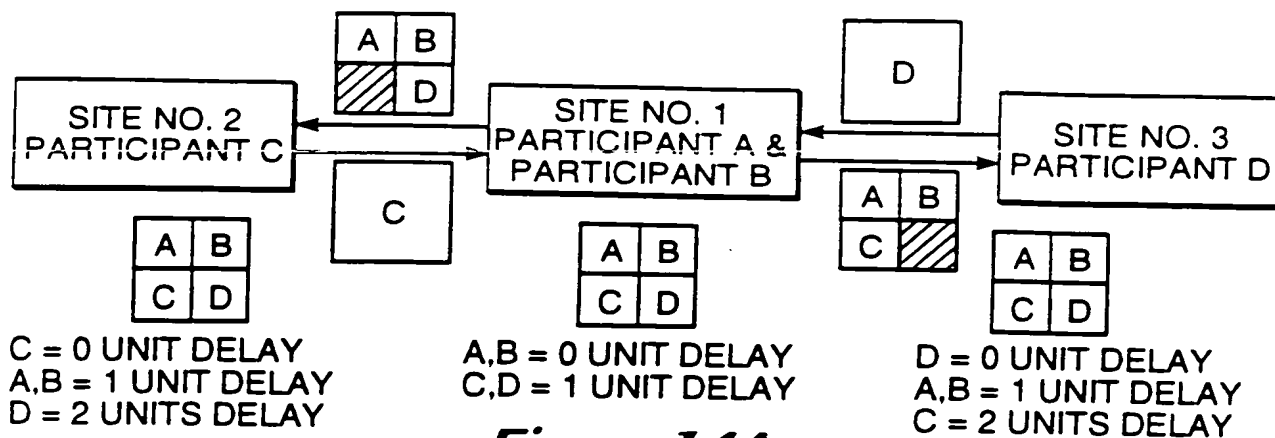


FIGURE 13B



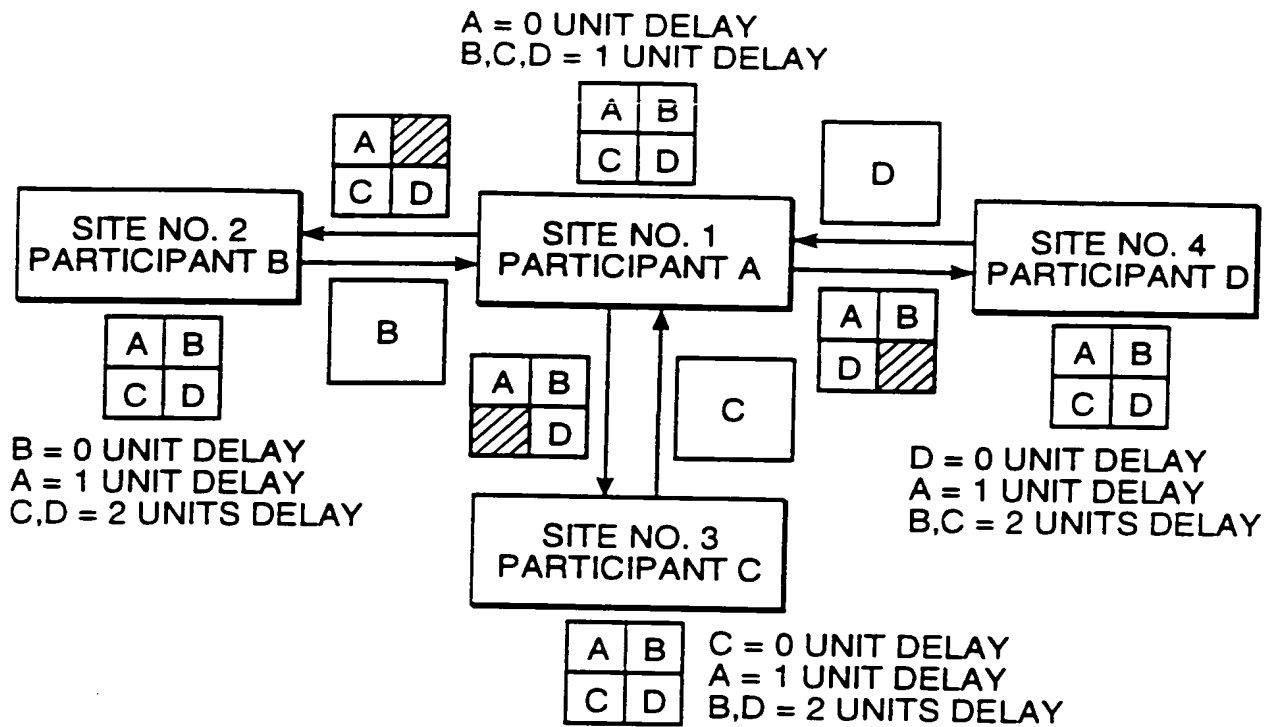


FIGURE 16

A = 0 UNIT DELAY
 B = 1 UNIT DELAY
 C = 2 UNITS DELAY
 D = 3 UNITS DELAY

B = 0 UNIT DELAY
 A, C = 1 UNIT DELAY
 D = 2 UNIT DELAY

C = 0 UNIT DELAY
 B, D = 1 UNIT DELAY
 A = 2 UNITS DELAY

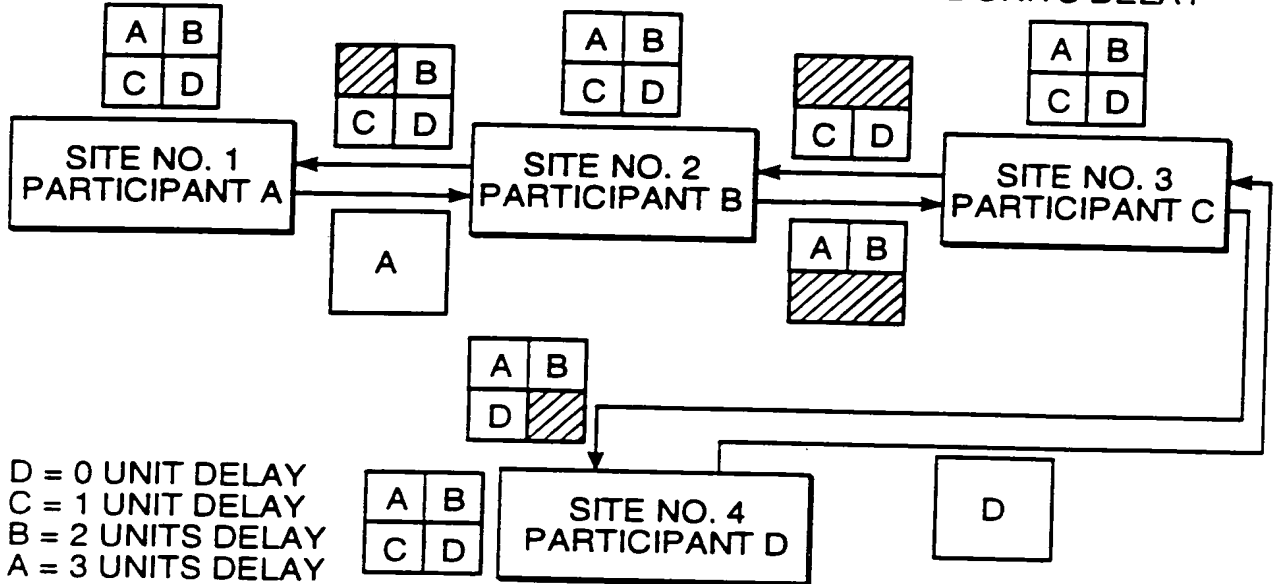


FIGURE 17A

A = 0 UNIT DELAY
 B = 1 UNIT DELAY
 C = 2 UNITS DELAY
 D = 3 UNITS DELAY

B = 0 UNIT DELAY
 A, C = 1 UNIT DELAY
 D = 2 UNIT DELAY

C = 0 UNIT DELAY
 B, D = 1 UNIT DELAY
 A = 2 UNITS DELAY

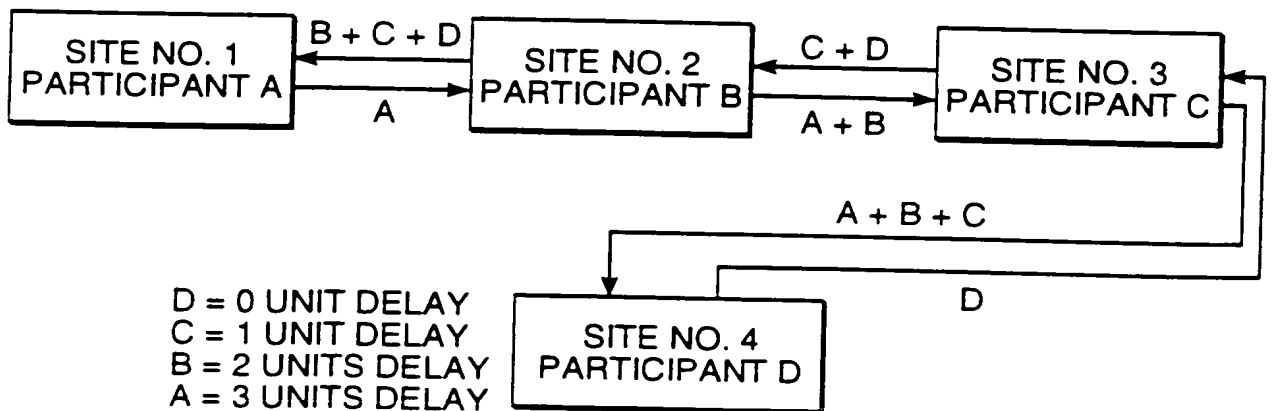


FIGURE 17B

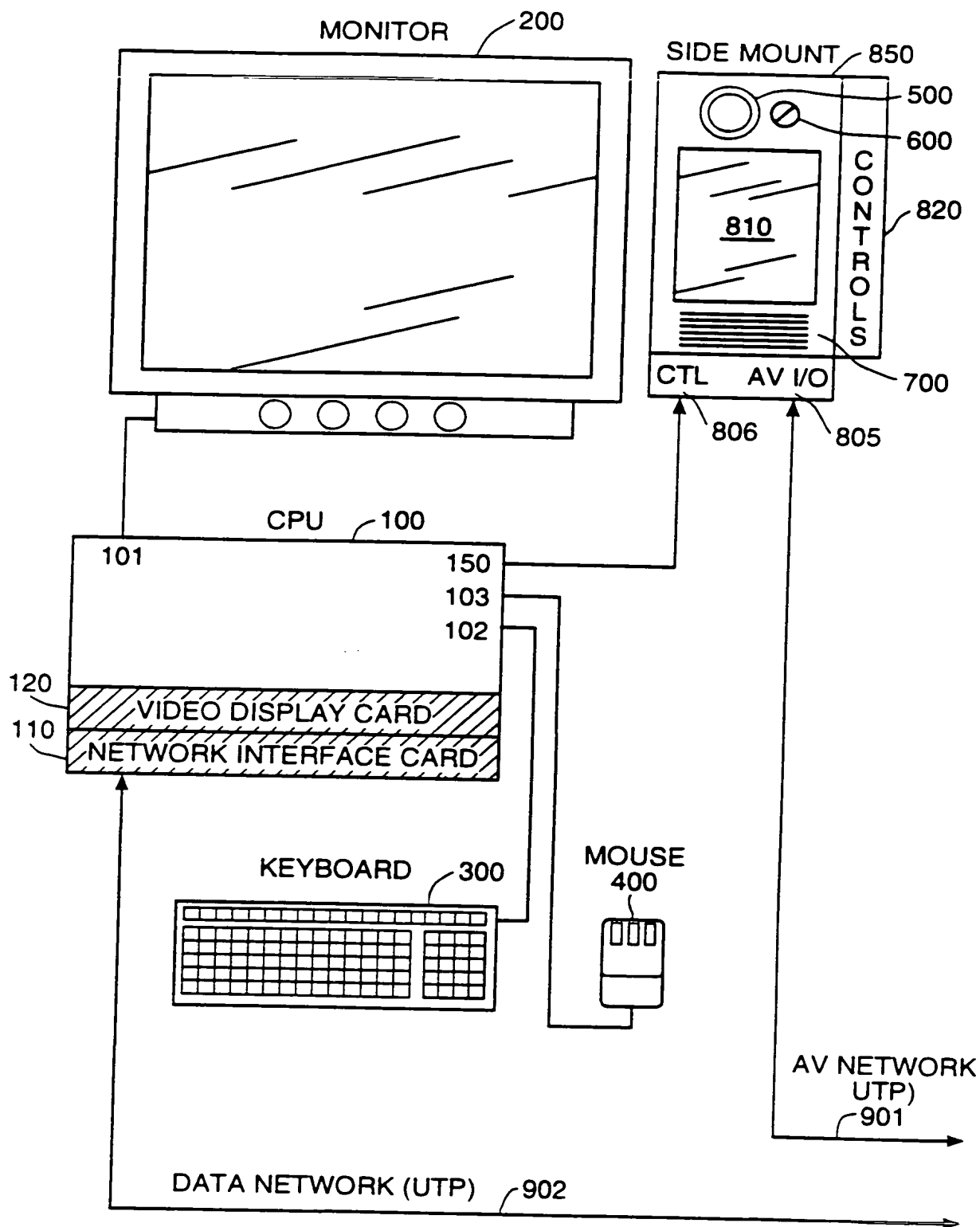


FIGURE 18B

The diagram illustrates the internal architecture of an ADD-ON BOX 800. It features several key components and their interconnections:

- External Connections:**
 - 801 V-IN:** Video input signal.
 - 802 A-IN:** Audio input signal.
 - 803 V-OUT:** Video output signal.
 - 804 A-OUT:** Audio output signal.
 - 806 CONTROL:** Control signal input/output.
 - 805 AUDIO/VIDEO I/O:** Interface to the AV NETWORK (UTP) 901.
- Internal Components:**
 - 811 PREAMP:** Two preamplifier blocks.
 - 812 POWER AMP:** Two power amplifier blocks.
 - 813 EQ:** Two equalizer blocks.
 - 814 ECHO CANCELER:** A block for processing audio signals to cancel echoes.
 - 815 VOL:** A volume control block.
 - 816 SELECT:** A selector block for routing signals.
 - 830 LOOPBACK/AV MUTE:** A control block for managing signal flow.
 - 840 AV TRANSCEIVERS:** A block for handling video and audio signals between the network and the box.
- Signal Flow and Connections:**
 - The **801 V-IN** signal is processed by the **840 AV TRANSCEIVERS** and then by the **811 PREAMP** and **812 POWER AMP** blocks before being output as **803 V-OUT**.
 - The **802 A-IN** signal is processed by the **811 PREAMP** and **812 POWER AMP** blocks before being output as **804 A-OUT**.
 - The **814 ECHO CANCELER** receives signals from the **811 PREAMP** and **812 POWER AMP** blocks and outputs to the **813 EQ** blocks.
 - The **815 VOL** block receives signals from the **811 PREAMP** and **812 POWER AMP** blocks and outputs to the **813 EQ** blocks.
 - The **816 SELECT** block receives signals from the **811 PREAMP** and **812 POWER AMP** blocks and outputs to the **813 EQ** blocks.
 - The **830 LOOPBACK/AV MUTE** block receives signals from the **811 PREAMP** and **812 POWER AMP** blocks and outputs to the **813 EQ** blocks.
 - The **840 AV TRANSCEIVERS** block receives signals from the **805 AUDIO/VIDEO I/O** and outputs to the **811 PREAMP** and **812 POWER AMP** blocks.

FIGURE 19

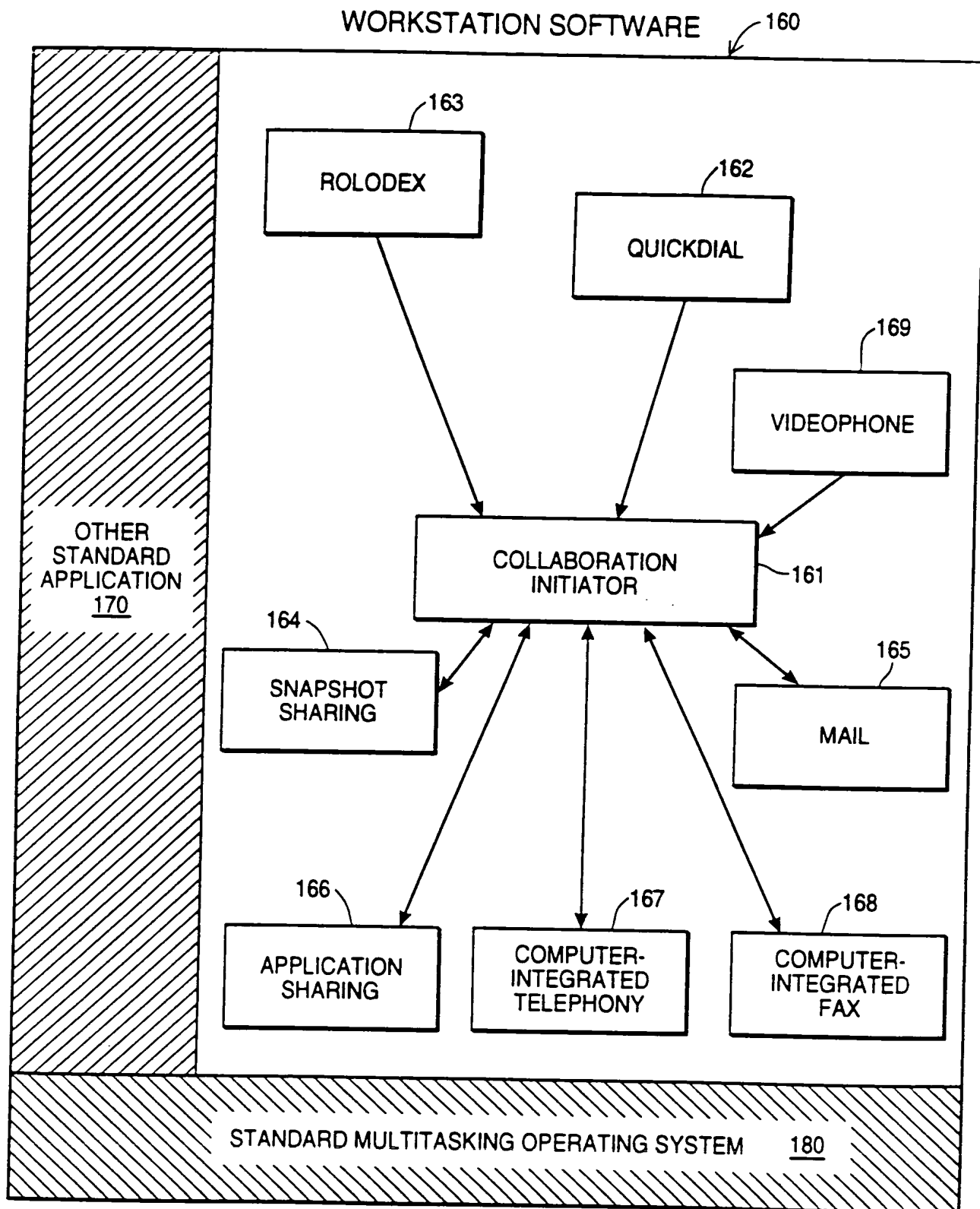


FIGURE 20

FIGURE 24

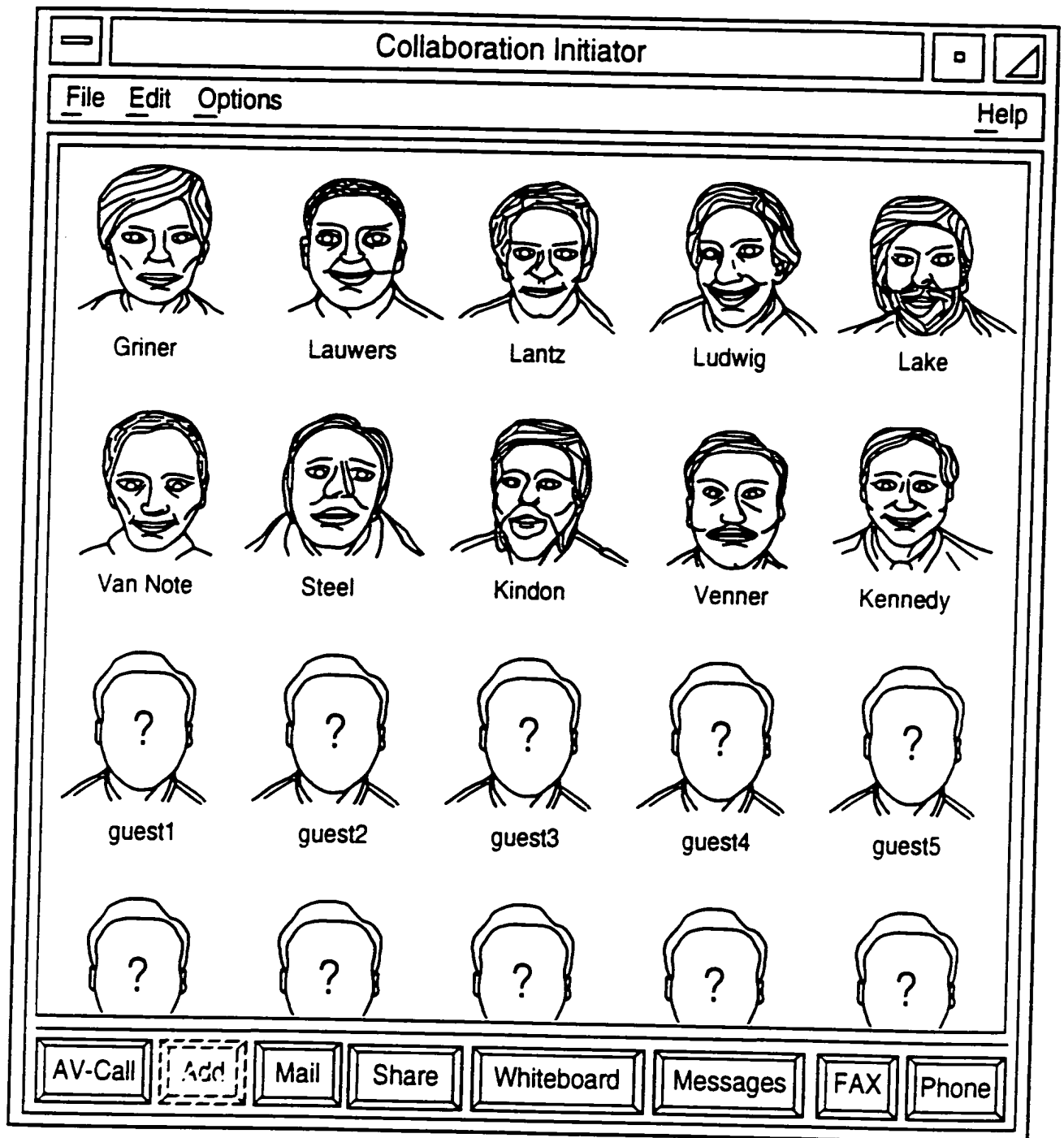


FIGURE 22

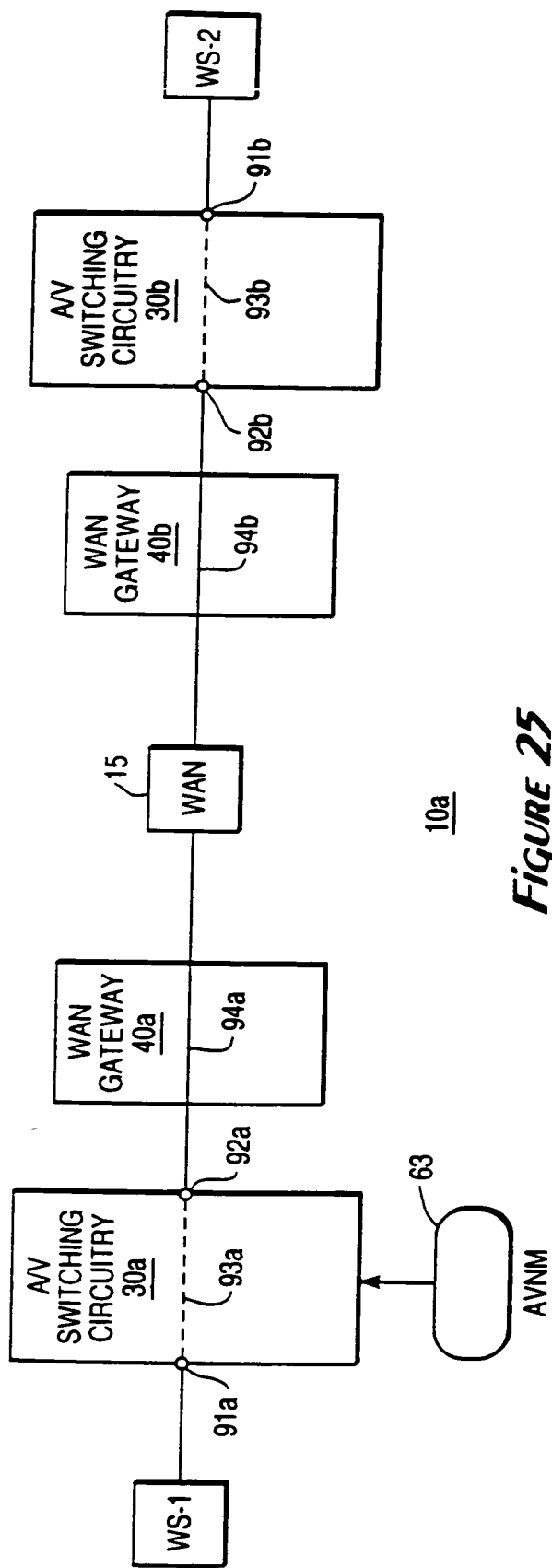


FIGURE 25

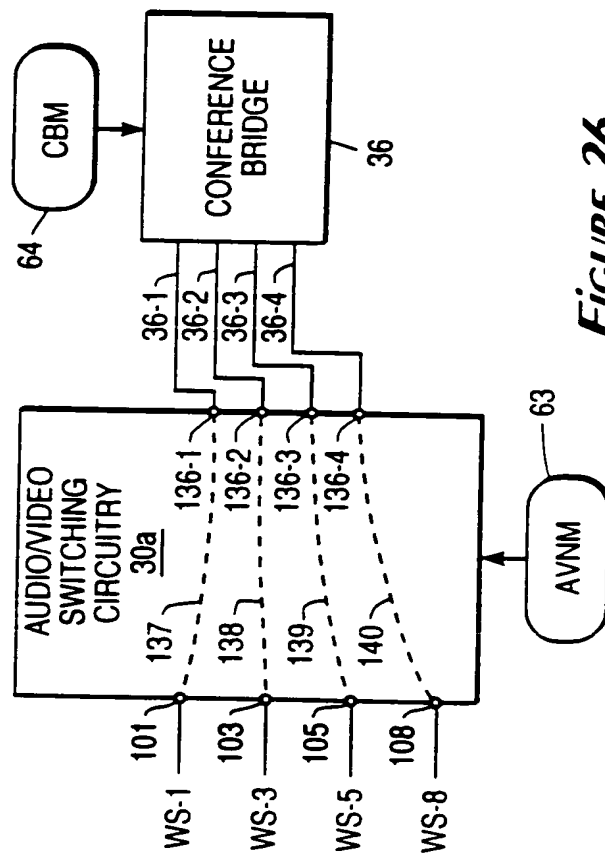


FIGURE 26

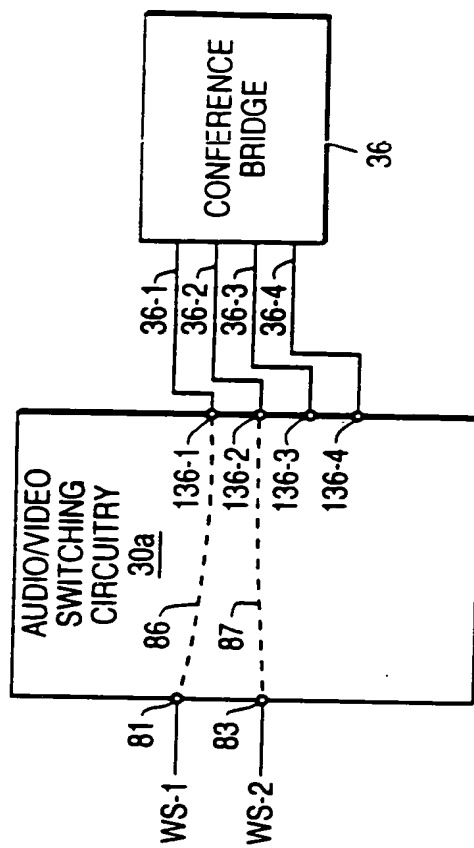


FIGURE 27

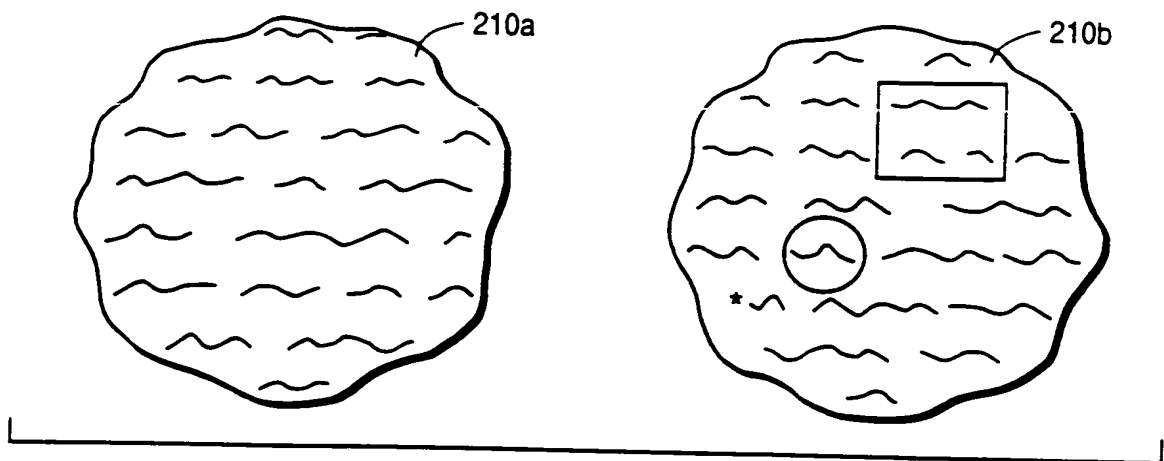


FIGURE 28

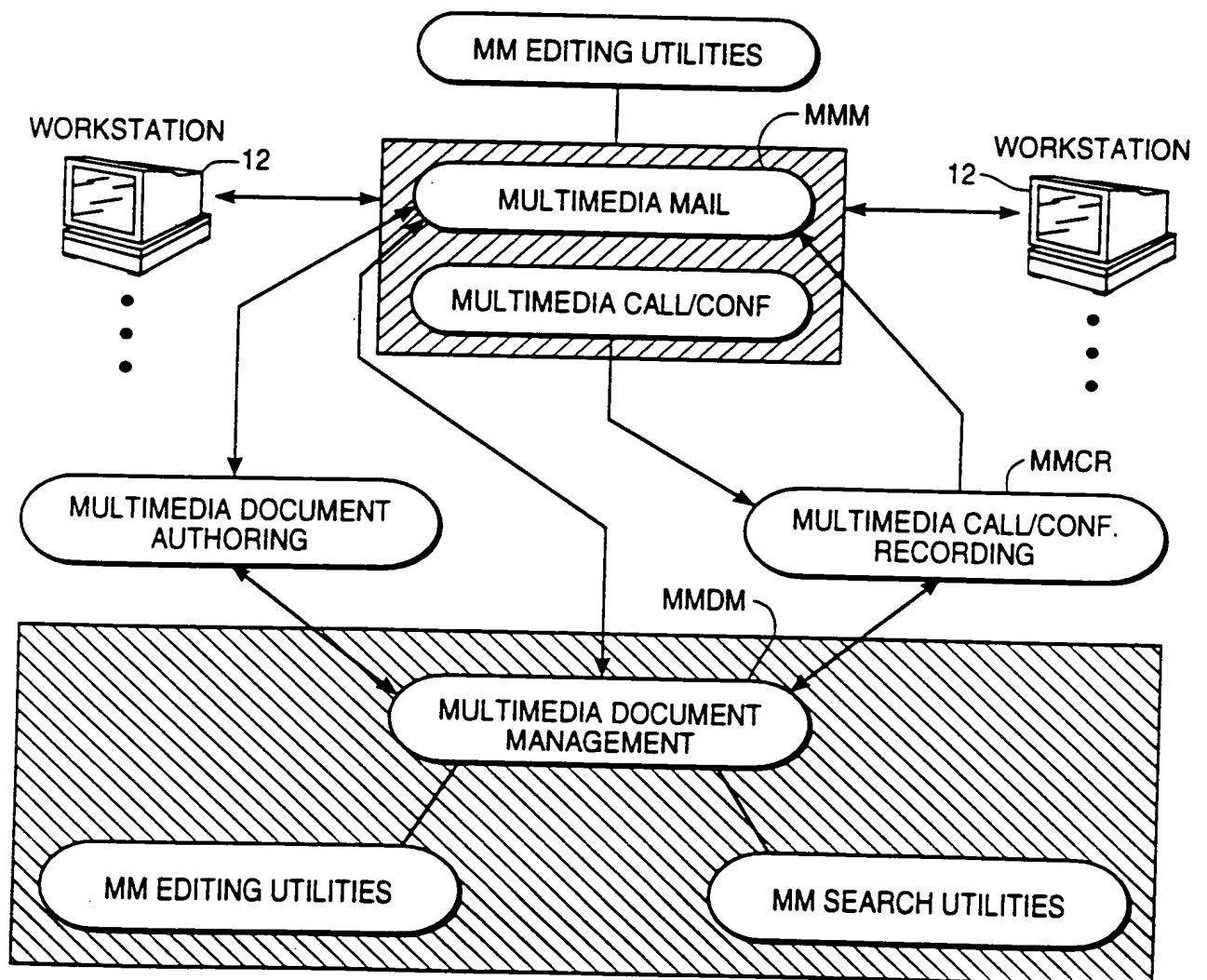


FIGURE 29

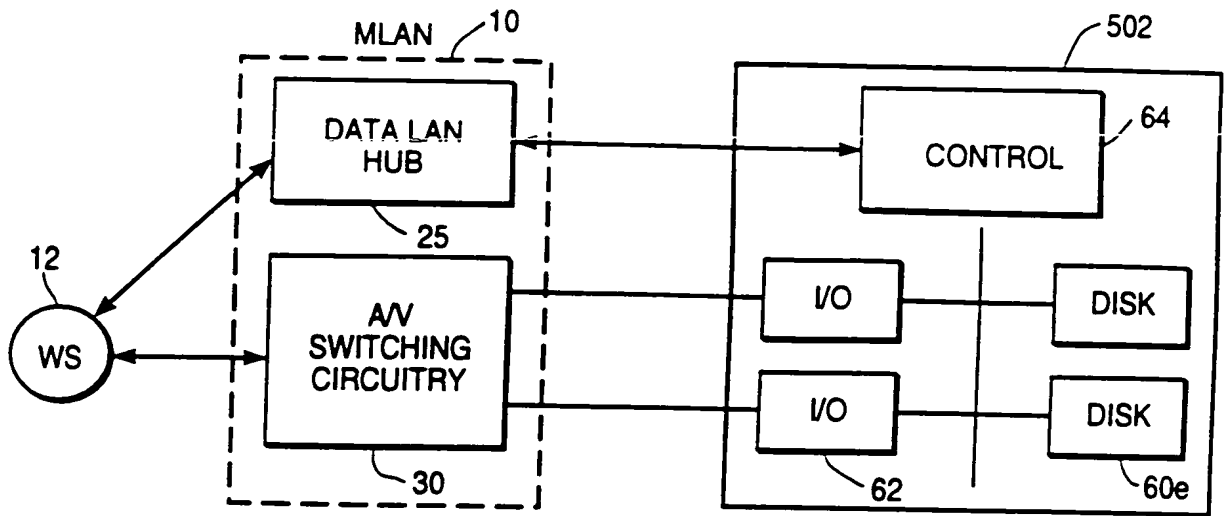


FIGURE 31A

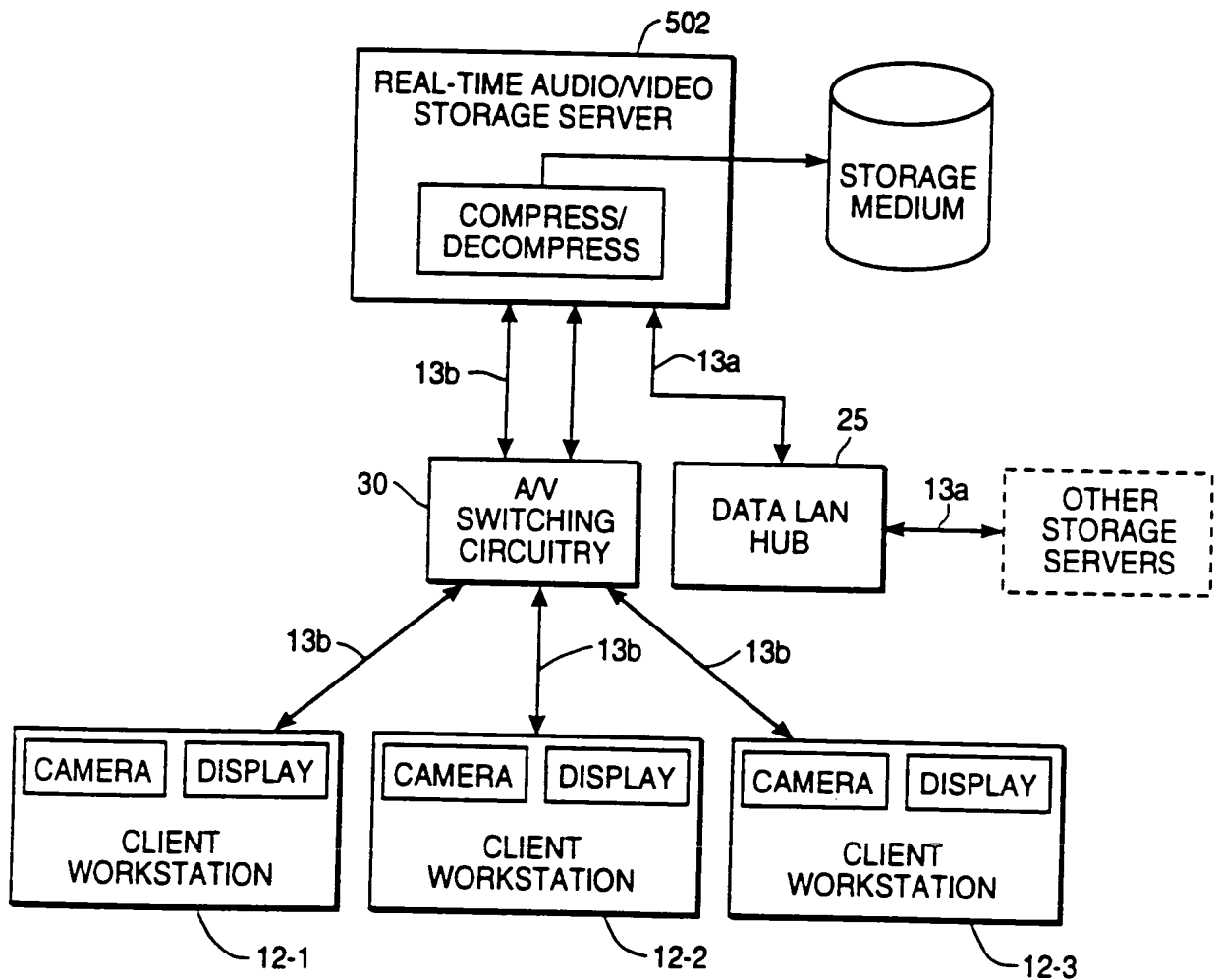


FIGURE 31B

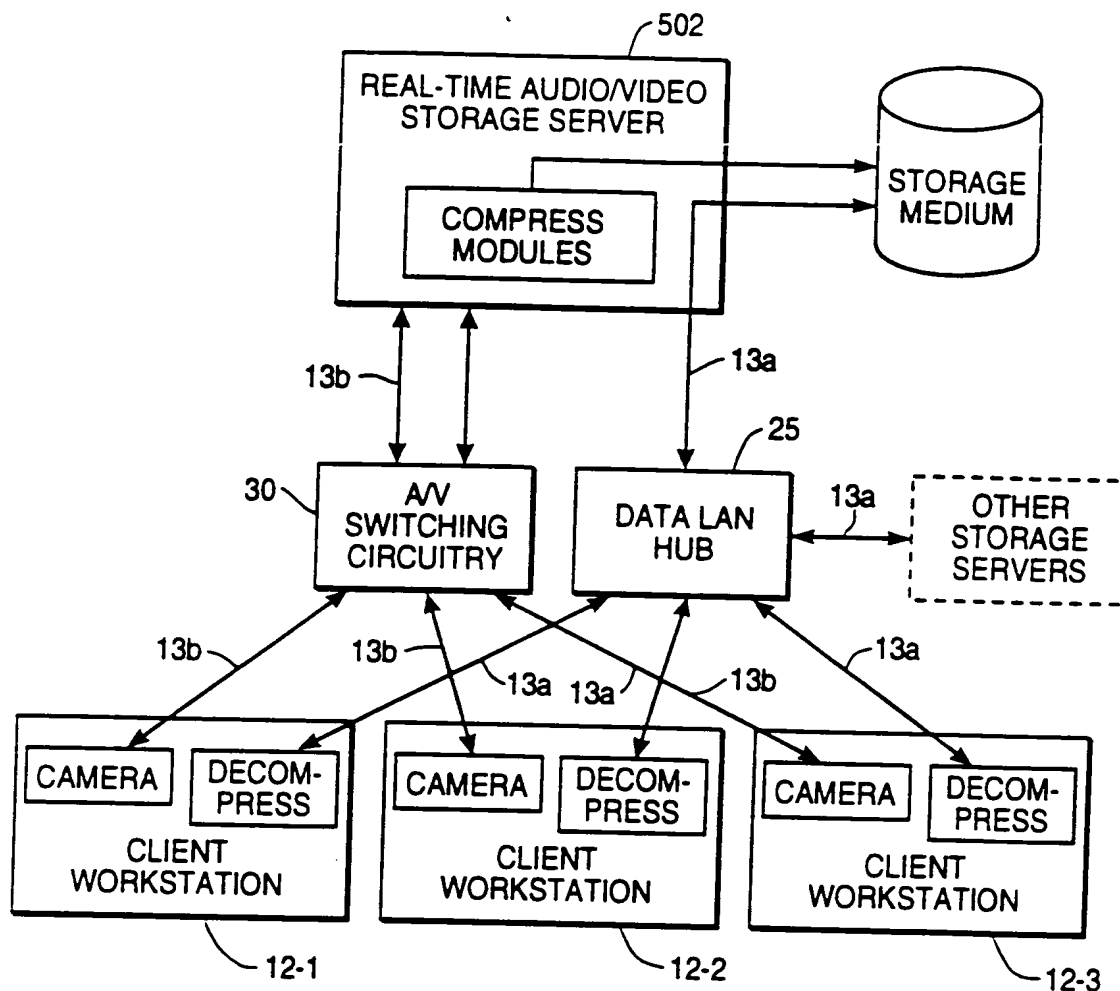


FIGURE 31C

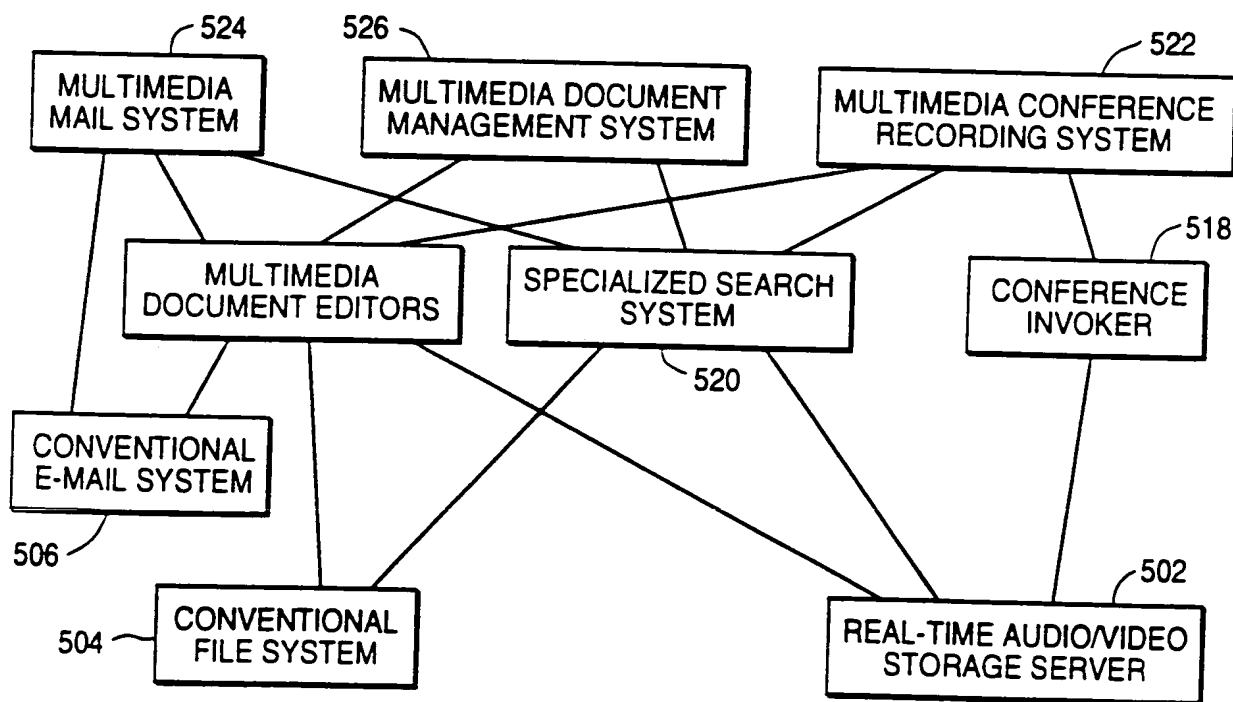


FIGURE 31D

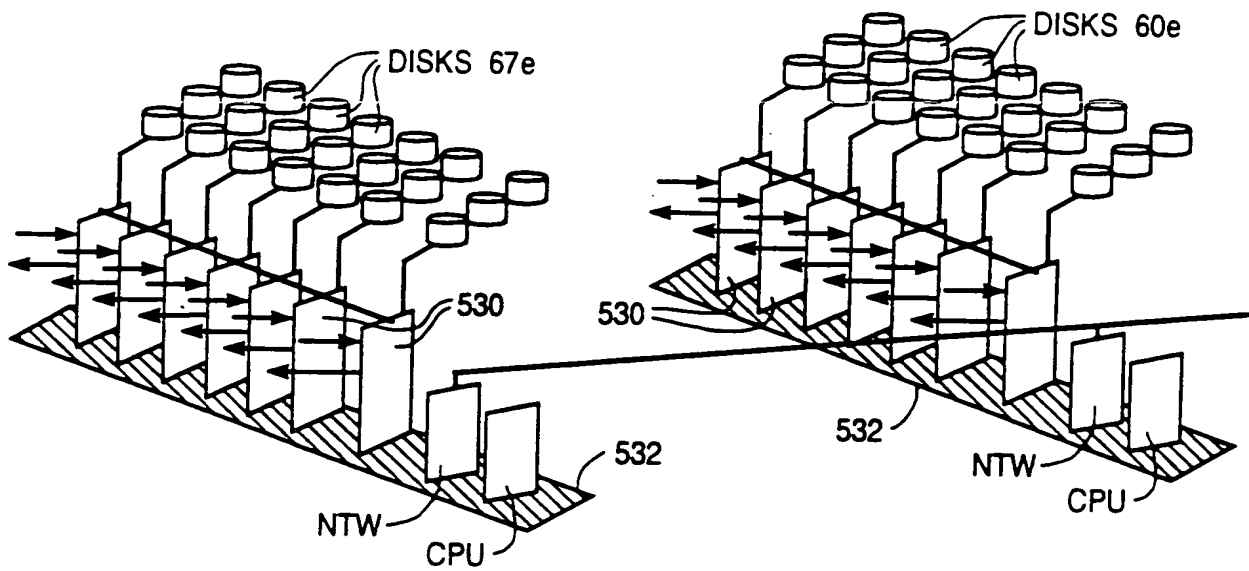


FIGURE 32

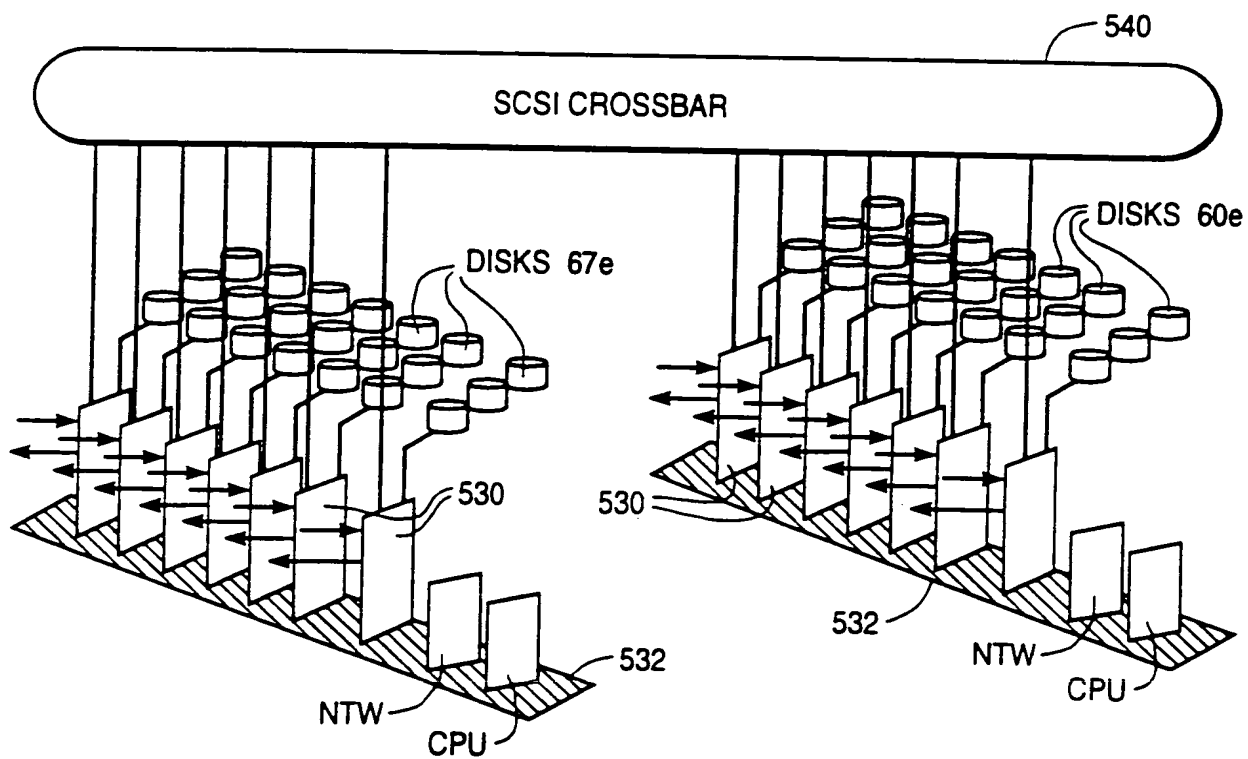


FIGURE 33

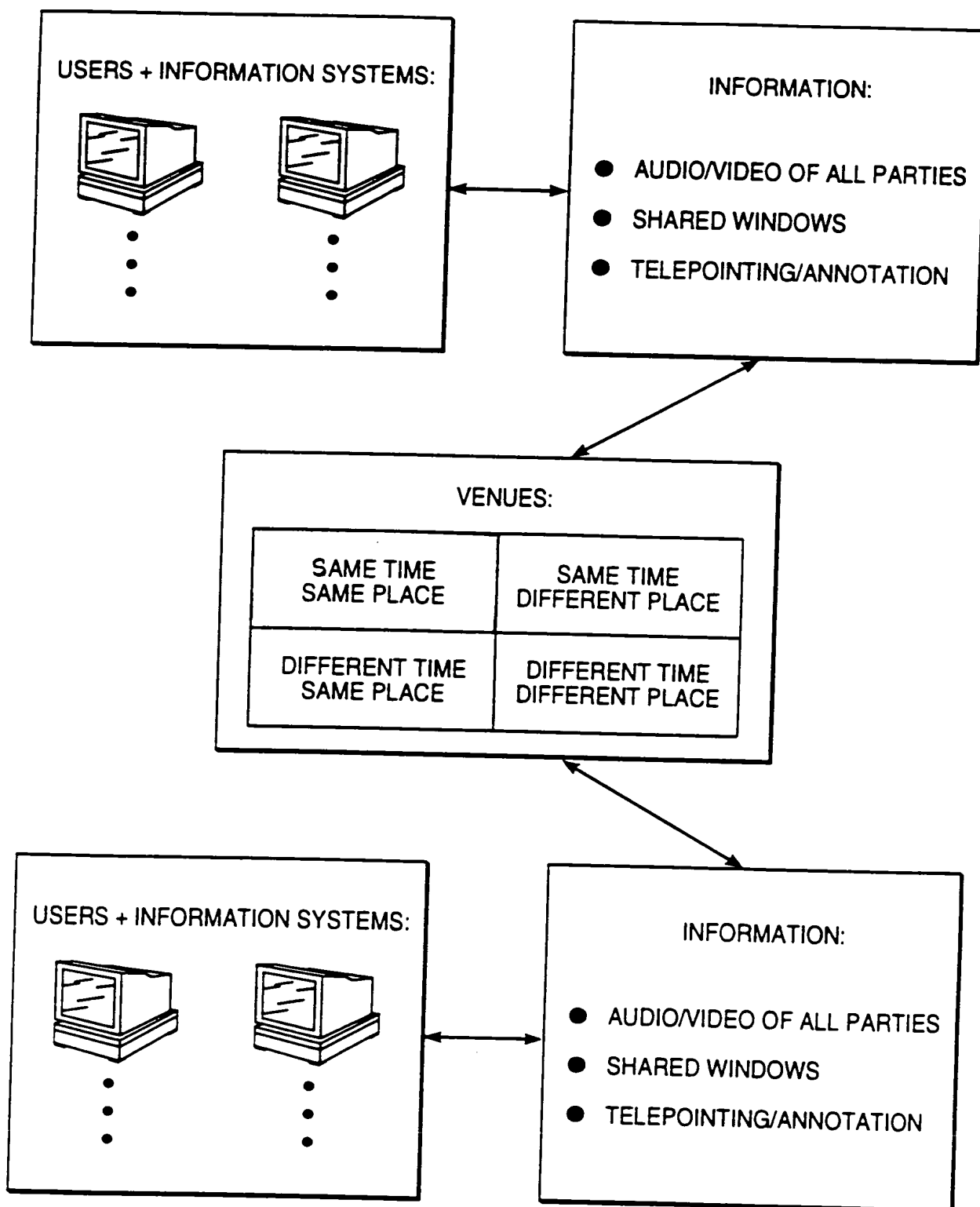


FIGURE 34

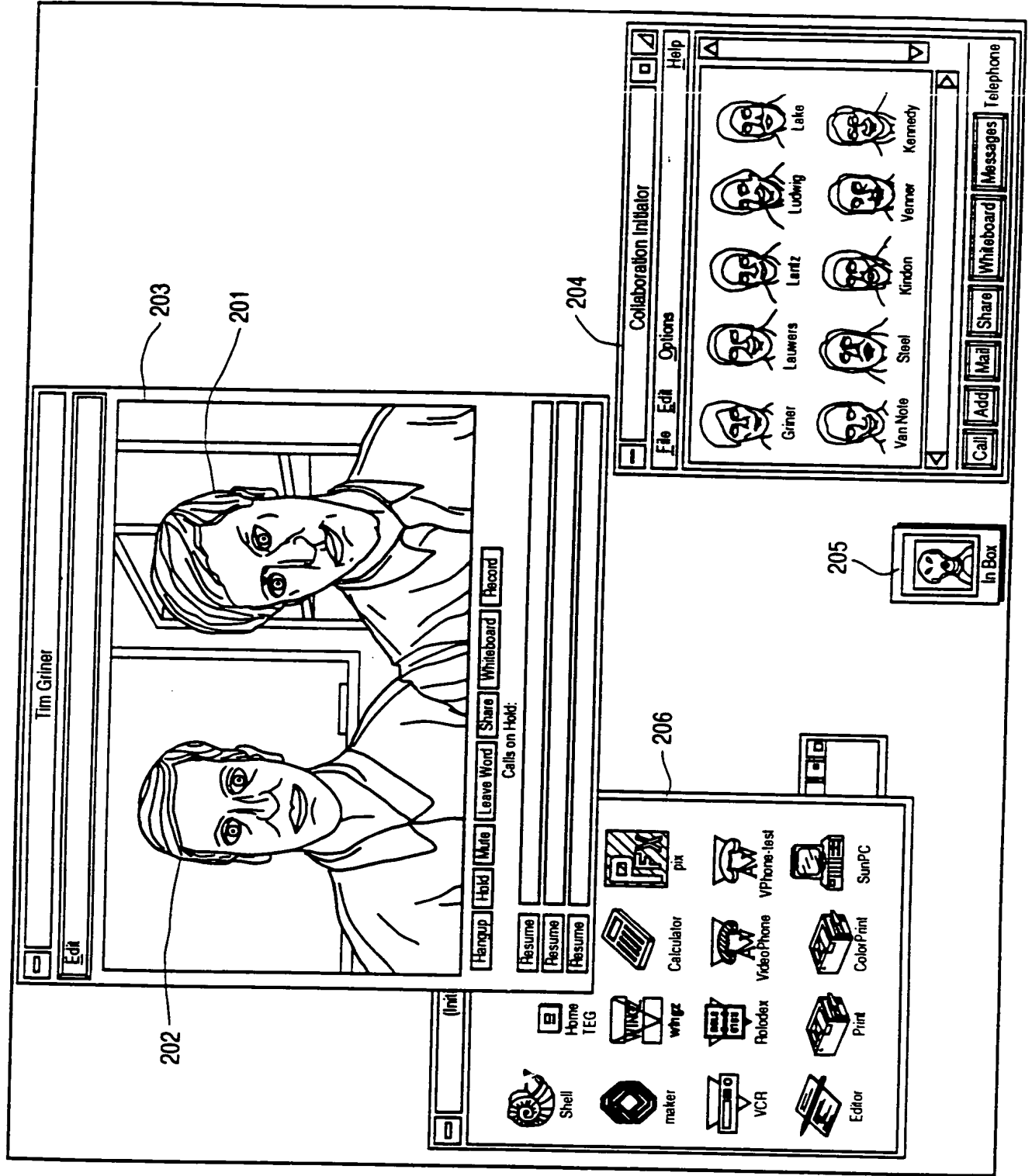


FIGURE 35

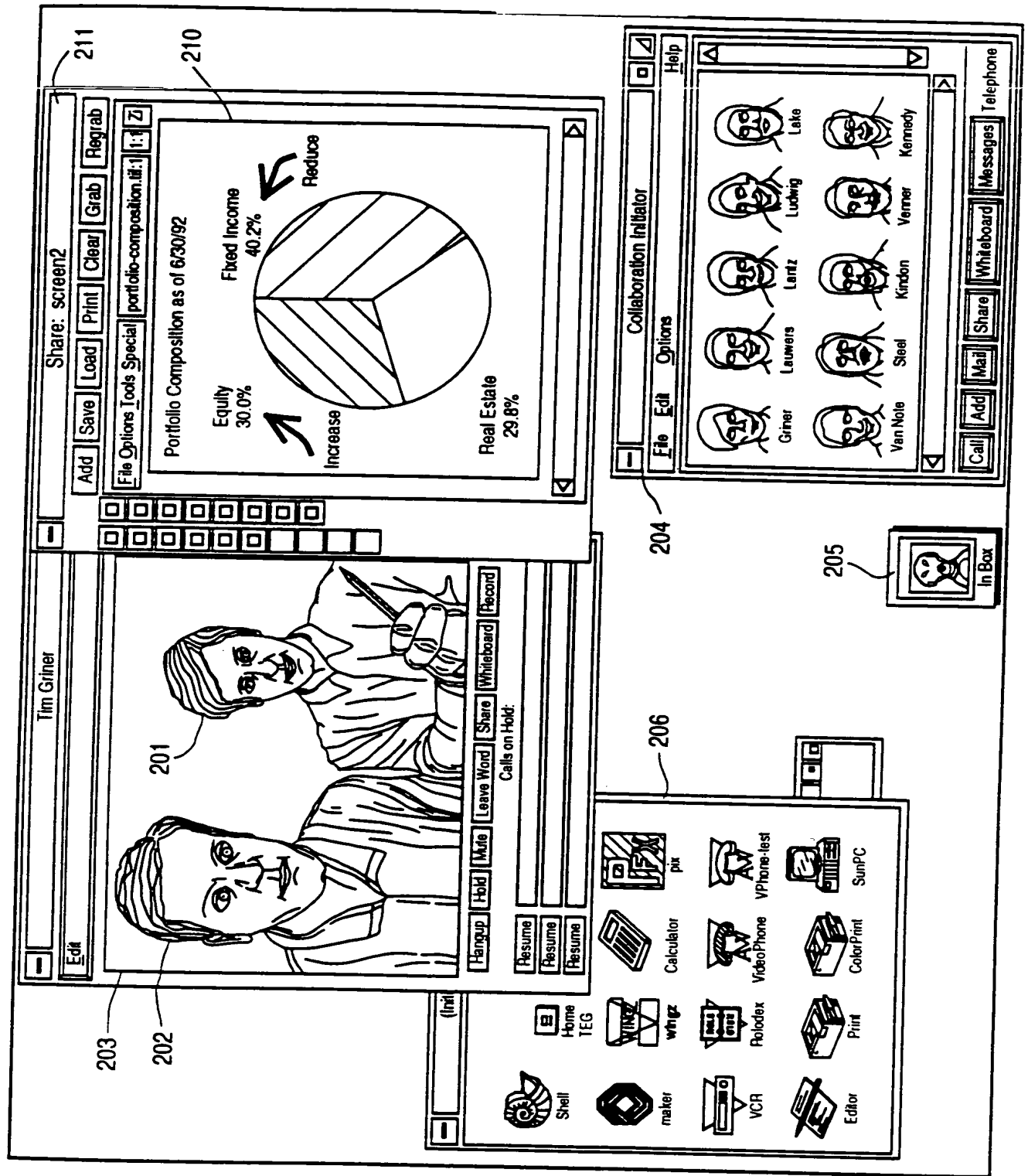
[illegible]

FIGURE 36

[illegible]

FIGURE 37

FIGURE 40

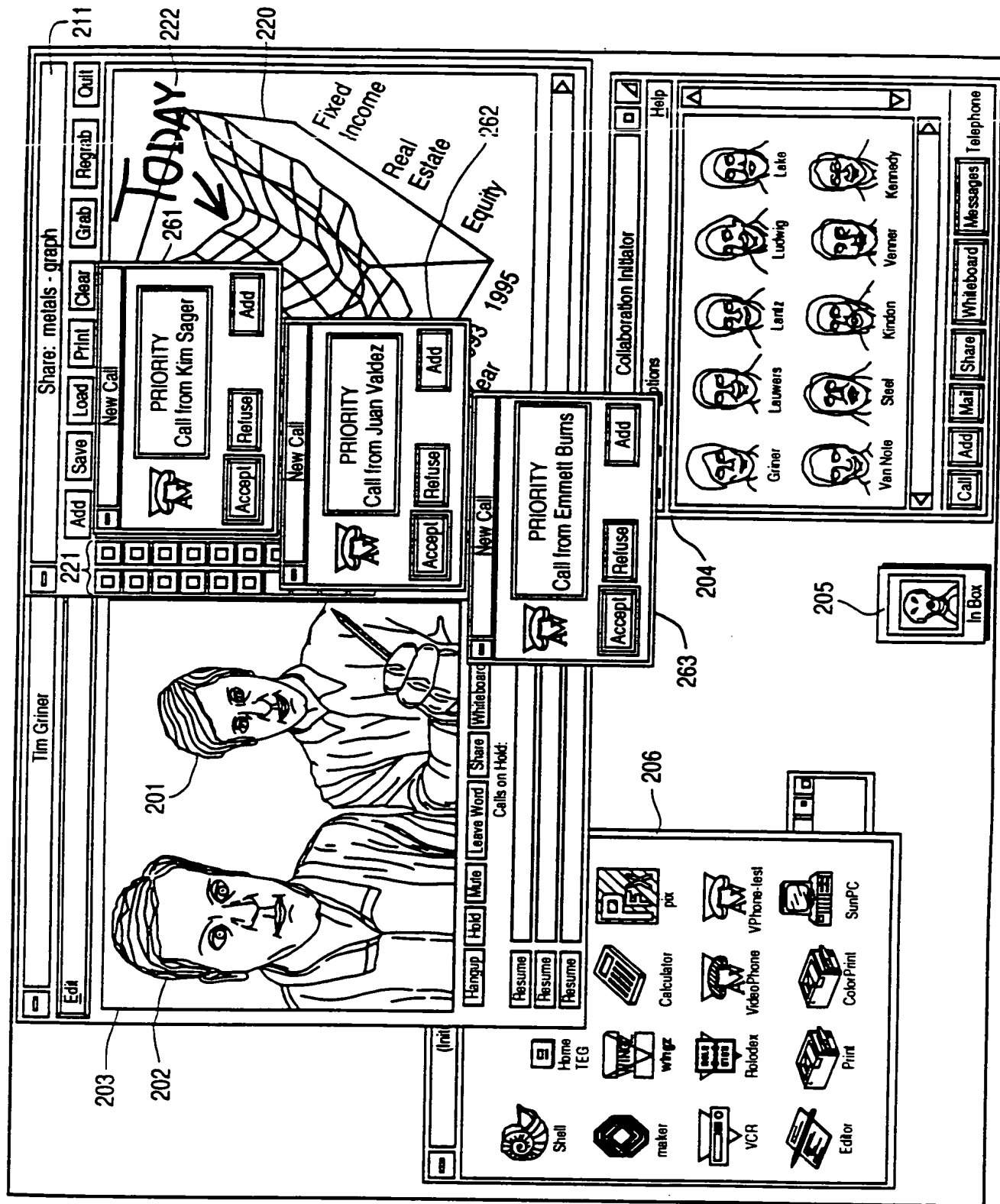


FIGURE 41

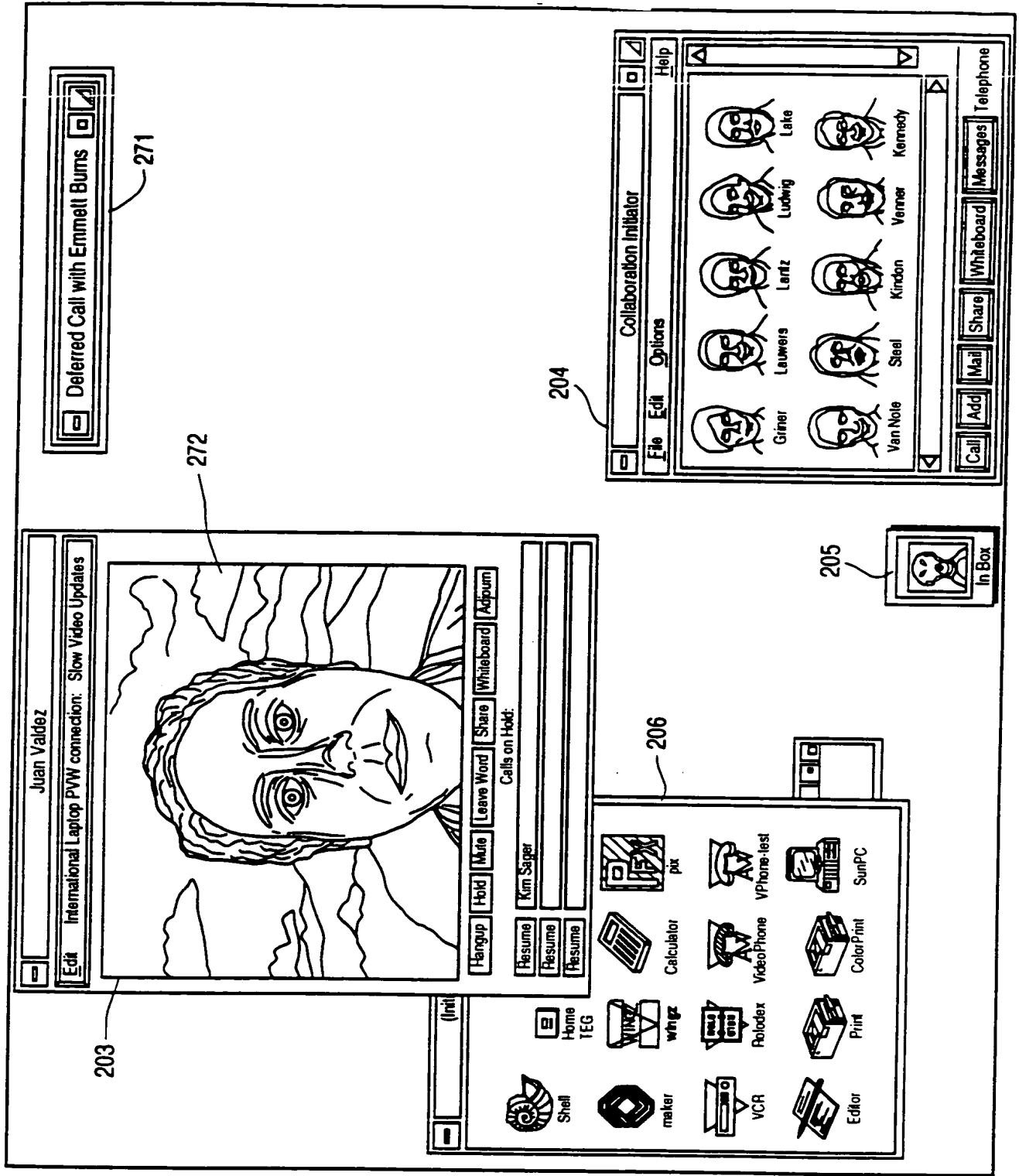


FIGURE 42